

ONE AND A HALF YEARS OF KENYAN ORTHOPTERA:
II. PAMPHAGIDAE, PYRGOMORPHIDAE, LENTULIDAE
AND SPUR-THROATED ACRIDIDAE

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THE RICHNESS OF the Kenyan grasshopper fauna owes much to the country's geography and ecological diversity: in the west are grasshoppers typical of central Africa; the Indian Ocean coast has its own special fauna and the forests and pastures of the highlands support a number of montane endemics such as *Parasphena* spp., *Kinangopa jeanneli* and *Pezocatantops* spp. In terms of African biogeography, Kenya is Afrotropical and at the boundary of the Sudanian and Somalian sub-zones (Dirsh, 1966). The semi-desert and thorn scrub of the Rift Valley allows Somalian species like *Pynodictya kelleri* and *Oedaleus instillatus* to penetrate far into the country. Most of the African subfamilies recognised by Dirsh (1965) are represented in Kenya, including some genera from the mainly southern African groups Porthetinae, Lentulidae and Euryphyminae.

A representative collection of grasshoppers was made while resident between 1991 and 1993 and on other visits. Most genera were readily identified using Dirsch (1965), whilst determination of species was achieved using many works listed by Johnston (1968) and Ritchie (1987) and by reference to collections at BM(NH) and the National Museum in Nairobi. Many African genera are unrevised, rendering accurate identification to species difficult.

Pamphagidae: Porthetinae

Lobosceliana gilgilensis (Bolivar). Split Crater, near Lake Elmenteita, 13.xii.1992, two females in long grass. These massive grasshoppers made no attempt to escape and were easily picked up by hand. In life the cervical membrane is lilac in colour.

Pyrgomorphidae

Chrotogonus spp. Members of this genus, especially micropterous specimens are difficult to identify. Specimens from the coast and Lake Victoria (Kilifi, Mnarani, 15-17.v.1992; Sokoke Forest, 24.iii.1992; Lamu, Shela, x.1992; Lake Victoria, Usengi, xi.1992) appear to be *C. hemipterus* Schaum whilst material from northern Kenya and the southern Rift Valley (Lake Magadi, xii. 1992; Olorgasailie, 26.iv.1992; Baragoi, El Barta Plains, 1.xi.1992; Kisimia, near Maralal, 5.xi.1992) appears to be *C. homalodemus* (Blanchard).

Phyteumas purpurascens (Karsch). Masai Mara, vii. 1985; Tigoni Falls, 29.xii.1991. Seen but not collected in the Nairobi National Park and in a field near Peponi Road, Nairobi.

Taphronota calliparea (Schaum). Kakamega Forest, 11.x.1991.

Dictyophorus griseus (Reiche & Fairmaire). Naivasha, Fisherman's Camp, Top Camp, 5.xii.1992.

Parasphena keniensis rehni Kevan. Tigoni Falls, 29.xii.1991 four males, eight females; Gatamayu, 13.ix.1992, one female.

P. naivashensis Kevan. Crater Lake, Naivasha, 22.xii.1991, one male, three nymphs; Eburru (Doiyo Buru), near Naivasha, 6.xii.1992, five males, two females.

P. ngongensis Kevan. Ngong Hills, 19.i.1992. 14 males, five females, one nymph.

P. mauensis Kevan. Kakamega Forest, 7-9.ii.1992, one female. A form with a purple dorsal stripe.

Pyrgomorpha cognata Krauss. Amboseli National Park, 5.xii.1991; Olorgasailie, 26.iv.1992.

Attractomorpha acutipennis (Guerin). Sokoke Forest, Kenya Glass Track, 1.xii.1991; Mnarani Kilifi, 21-24.iii.1992; Jimba, near Kaloleni, 23.iii.1992.

Lentulidae

Usambilla oraria Jago. Sokoke Forest, Jilore Track, 23.iii.1992 & 16.v.1992.

Acrididae: Hemiacridinae

Spathosternum pygmaeum Karsch. Kakamega Forest, 11.x.1991 & 7-9.ii.1992.

Mesopersa filum (Bolivar). Kakamega Forest, 7-9.ii.1992.

Oxyinae

Oxya hyla Serville. Sokoke Forest, Kenya Glass Track, 1.xii.1991, swept from long grass.

Coptacridinae

Parepistaurus felix Kevan. Sokoke Forest, 24.iii.1992, 20.iv.1992, coastal endemic.

P. deses nairobii Green (*in press*). Hurlington, Nairobi, in garden, v.1992; Njukiini Forest, Embu, 5.vii.1992; Thika Falls, xi.1992; Gatamayu, 13.ix.1992; Ololua Forest, Karen, 15.iii.1992, 11.vii.1992, 15.viii.1992, 19.ix.1992. A newly described subspecies with a bright orange-red underside in mature adults.

Paracoptacra ?ascensi Giglio-Tos. A single female with brown markings collected above Lessos at 8000ft, 7.ii.1992, on shrubs in open woodland shows features of *P. ascensi* but to some extent also of *P. cauta*.

P. cauta Karsch. Ololua Forest, Karen, 15.iii.1992; Peponi Road, Nairobi, 19.i.1992; Kakamega Forest, 7-9.ii.1992, Njukiini Forest, Embu, 5.vii.1992.

These grasshoppers have green markings and dwell amongst luxuriant vegetation at forest edges or in light gaps.

Calliptaminae

Acorypha sp. Eburru, 6.xii.1992; Split Crater, Lake Elmenteita, 13.xii.1992.

Euryphyminae

Phymeurus granulatus (Uvarov). Eburru, 6.xii.1992. Two males.

Eyrepocnemidinae

Eyrepocnemis plorans (Charpentier). Awasi, Lake Victoria, xi.1992, two females; Kakamega Forest, 7-9.ii.1992, one female. A darkly pigmented, fully-winged *Eyrepocnemis* which appears to be a form of *E. plorans* was collected from several sites in the Naivasha district (Hell's Gate, 1.xi.1991, one male; Crater Lake, 22.xii.1991, one nymph; Split Crater, Lake Elmenteita, 13.xii.1992, one male; Eburru, 6.xii.1992, one male).

Heteracris coerulescens (Stål). Kibarani, Kilifi, 22.iii.1992.

H. brevipennis Bolivar. Hurlingham, Nairobi, iv.1992, in garden; Lavington, Nairobi, v-vi.1991, on garden bean plants; Ol Doinyo Sabuk, 25.i.1992; Ngong Hills, 19.i.1992; Tigoni Falls, 29.xii.1991; Ololua Forest, Karen, 15.iii.1992. Kenya highland endemic.

Oxyaidea poultoni Ramme. Sokoke Forest, Kenya Glass Track, 1.xii.1991, swept from grass; Ngerenya, Kilifi, 21.iii.1992, colony on reeds in dried-up pond.

Taramassus sp. Olekemonje Gorge, Magadi Road, 25.v.1991; Mnarani, Kilifi, 21-24.iii.1992 & 15-17.v.1992; Ololua Forest, Karen, 10.x.1992; Sokoke Forest, Kararacha Track, 18.iv.1992; Sokoke Forest, 24.iii.1992; Lerochi Plateau, Maralal, 31.x.1992; Nairobi, wasteland beside Mbagathi Way, v.1991. This genus is unrevised.

Cataloipus cognatus (Walker). Nairobi, on wasteland between Kenyatta National Hospital and Mbagathi Way, v.1991.

Tylotropidius didymus (Thunberg). Kakamega, in old quarry, 7-9.ii.1992.

Metaxymecus gracilipes (Brancsik). Long-winged examples were found in dry open scrub at the following localities: Magadi Road, 1.ii.1992; Kilifi, Ngerenya, 21.iii.1992; Kilifi, Mnarani, 21-24.iii.1992. The short-winged form, formerly known as *Tylotropidius lanceolatus* Ramme but synonymised with *Metaxymecus gracilipes* by Grunshaw (1995) was found at Kakamega, in a moist clearing next to the Forest Resthouse, 11.x.1991 & 7-9.ii.1992. The two forms appear to have different ecological requirements.

Paraprocticus pendulus (Karsch). Sokoke Forest, 1991-1992; Ololua Forest, Karen, 11.vii.1992 & i.1993; Chania Falls, Thika, 5.vii.1992; Nairobi, Hurlingham, in garden, v.1992.

Catantopinae

Kinangopa jeanneli Uvarov. Gatamayu Forest, 13.ix.1992. The predominantly green males occur on forest herbage in light gaps in company with *Aresceutica vansomerini*. The brown angular females which resemble *Ixalidium* occur in leaf litter nearby.

Ixalidium sp. Sokoke Forest, Kenya Glass Track, 1.xii.1991; Sokoke Forest, Jilore Track, 23.iii.1992 & 16.v.1992; Sokoke Forest, 24.iii.1992; Mnarani Kilifi, 21-24.iii.1992. The genus awaits revision.

Stenocrobylus cervinus Gerstaecker. Kilifi, 20.iv.1992, a male appeared on Land-rover window when driving across Kilifi Bridge.

Pseudophialosphaera severini (Ramme). Sokoke Forest, Kenya Glass Track, 1.xii.1991; Sokoke Forest, Jilore Track, 23.iii.1992; Sokoke Forest, 24.iii.1992.

Aresceutica vansomerni Kevan. Tigoni Falls, 29.xii.1991; Gatamayu Forest, 13.ix.1992; Kieni Forest, 13.ix.1992; Njukiini Forest, Embu, 5.vii.1992.

Brachycatantops emalicus (Kevan). Sokoke Forest, Jilore Track, 20.iv.1992.

Pezacatantops lobipennis (Sjöstedt). Timboroa, 9000ft, 10.x.1991.

P. ngongi (Uvarov). Ngong Hills, 8000ft, 19.i.1992. Endemic to the Ngong Hills.

Auloserpusia phoeniconata Jago. Kakamega Forest, 11.x.1991.

Cerechta bouvieri Bolivar. Sokoke Forest, Kararacha Track, 18.iv.1992.

Pteroperina steini Ramme. Kakamega Forest, 7-9.ii.1992; Saiwa Swamp, 12.x.1991.

Abisares viridipennis (Burmeister). Nairobi, dead on path, Wellcome Trust research laboratories compound, iv.1992.

Cardeniopsis nigropunctatus (Bolivar). Kakamega Forest, abundant in large clearing north of the Forest Resthouse, 7-9.ii.1992.

Diabolocatantops axillaris (Thunberg). Magadi, 1.ii.1992; Kilifi, xi.-xii.1991; Malindi, vii.1985.

Hadrolecocatantops kissanjanicus (Rehn). Kakamega Forest, 7-9.ii.1992.

Epacrocatantops curvicerus (Miller). Nairobi, Kirichwa Kubwa, 1.i.1992; Nairobi, Wellcome Trust research laboratories compound, iv.1992; Tumu Tumu, near Karatina, 26-27.ix.1992.

Cryptocatantops alessandricus (Sjöstedt). Kilifi, Mnarani, 21-24.iii.1992; Sokoke Forest, Kararacha Track, 18.iv.1992; Malindi, Silversands, vii.1985; Sokoke Forest, Jilore Track, 23.iii.1992 & 16.v.1992; Sokoke Forest, 24.iii.1992; Kilifi, Kibarani, 22.iii.1992; Kilifi, xi-xii.1991.

Catantops momboensis Sjöstedt. Hell's Gate, 1.vi.1991; Naivasha, Kongoni, 22.xii.1991; Lake Victoria, Usengi, xi.1992.

Pseudopropacris vana (Karsch). Ololua Forest, Karen, 15.iii.1992; Njukiini Forest, Embu, 5.vii.1992.

Cyrtacanthacridinae

Anacridium melanorhodon (Walker). Lake Magadi, Emarti Oo Lainyamok Plain, 11.x.1992, in thorn scrub; seen but not collected by Magadi golfcourse, 1992.

Cyrtacanthacris tatarica (L.). Nairobi, Wellcome Trust research laboratories compound, iv.1992.

Ornithacris turbida (Walker). Kakamega Forest, 7-9.ii.1992. A huge orange-winged species, of Central African distribution (Mungai, 1987a); scarce in large grassy clearings, such as the old quarry; wary and very difficult to catch.

O. pictula magnifica (Bolivar). These huge purple-winged grasshoppers were found in small numbers at the Split Crater near Lake Elmenteita, 13.xii.1992. When disturbed they fly like birds between scrubs.

Acanthacris deckeni (Gerstaecker). A large pale-green species. Sokoke Forest along the Jilore Track, 16.v.1992.

A. ruficornis (Fab.). Nairobi; Tigoni Falls, 29.xii.1991; Ololua Forest, Karen, xi.1992; Wellcome Trust research laboratories compound, iv.1992. Examples seen high in trees at Kakamega but not collected, may have been *A. ruficornis* or *A. elgonensis* (see Mungai, 1987b).

Localities: 2. Western Kenya

Western Kenya is densely populated but the surviving natural habitat preserves many western elements otherwise unknown in Kenya. Kakamega Forest is the most impressive entomological locality with over three-hundred species of butterfly (Larsen, 1991), including majestic blue *Charaxes tiridates* and *C. bipunctatus*, *Salamis temora* and the endemic *Euphaedra rex*. One may stay at the Forest Resthouse, a basic but perfectly situated building on stilts. An attempt at camping in torrential rain resulted in a tent full of water. Entry to the forest is provided by unsignposted dirt roads which are slippery in wet weather. The roadsides, trails and small tea plantations are colonised by grasshoppers typical of disturbed ground like *Heteropternis coulöniana* and *Morphacris fasciata*. Kakamega *M. fasciata* have yellow wings unlike others I have seen in Kenya with red wings. Light gaps in the forest itself harbour species characteristic of the equatorial forests of Central Africa such as *Spathosternum pygmaeum*, *Auloserpusia phoeniconata*, *Pteroperina steini*, the short-winged form of *Metaxymecus gracilipes* (syn. *Tylotropidius lanceolatus*) and the leaf-like tetrigid *Xerophyllum russisianum* Rehn. At night, an illuminated sheet attracted the common phaneropterine *Phanoptera sparsa* and the beautiful mantid *Phloeomantis* sp. Open areas of grassland at Kakamega are populated by

equatorial grassland species including *Hadrolecocatantops kissanjanicus*, *Gastrimargus mirabilis*, *Mesospersa filum* and *Cardeniopsis nigropunctatus* and more widespread insects like *Gastrimargus africanus*. Outside Kakamega Forest there are other interesting areas of woodland in western Kenya. For instance, at Saiwa Swamp National Park there are strips of forest with *Pteroperina steini* and *Odontomelas kwidschwianus*.

The habitat around Lake Victoria is largely degraded by the dense human population and species typical of disturbed ground occur, such as *Acrotylus patruelis*. On the sandy lakeshore itself, *Calephorus compressicornis* occurs, a very widespread insect found as far north as dunes on the Brittany coast. A feature of gravel road verges in western Kenya is *Acrotylus elgonensis*, occurring at Awasi (4500ft) near Lake Victoria and abundantly in the Western Highlands near Lessos (8000ft) and Timboroa (9000ft). It seems likely that road construction has allowed this insect to extend its range. Also at Timboroa, where a main road provides easy access to highland pasture is *Pezocatantops lobicornis*, a small brachypterous catantopine grasshopper endemic to the Western Highlands.

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p. 281. For *Parasphena kinangopa* read *Parasphena keniensis rehni*.

p. 281. The end of the second paragraph should read “. . . *Parasphena naivashensis*, *Phymeurus granulatus*, *Acorypha* sp., . . .”